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# FINANCIAL HIGHLIGHTS—POWER PROGRAM

For the years ended September 30	(millions of dollars)	1995	Percent Change
	1996		
Operating revenues	\$ 5,693	\$ 5,375	6%
Operating expenses	(3,656)	(3,448)	6%
Operating income	2,037	1,927	6%
Other expense, net	(10)	(91)	(89%)
Interest expense	(1,966)	(1,826)	8%
Net income	\$ 61	\$ 10	510%
Total assets	\$34,029	\$33,293	2%
Capitalization			
Long-term debt	\$ 25,570	\$23,889	7%
Proprietary capital	4,028	4,030	_
Total capitalization	\$29,598	\$27,919	6%

# **POWER SYSTEM STATISTICS**

or the years ended September 30 (millions of kilowatt-hours)			Percent
	1996	1995	Change
System input			
System generation			
Hydro, including pumped storage	16,107	13,515	19%
Fossil	97,046	94,347	3%
Nuclear	35,426	23,355	52%
Combustion turbine	217	393	(45%)
Total net generation	148,796	131,610	13%
Purchased	4,929	3,793	30%
Net interchange and wheeling	(7,849)	3,604	(318%)
Total system input	145,876	139,007	5%
System output			
Sales			
Municipalities and cooperatives	117,035	110,245	6%
Industries directly served	16,599	16,684	(1%)
Federal agencies	6,966	7,226	(4%)
Total sales	140,600	134,155	5%
Other	1,172	1,378	(15%)
Losses	4,104	3,474	18%
Total system output	145,876	139,007	5%
Net winter dependable capacity (megawa	tts) 28,123	25,831	9%
Percent of average gross generation to			
net winter dependable capacity	64.39	64.39	_
System peak load (megawatts)—summer	25,376	25,496	_
System peak load (megawatts)—winter	25,995	24,676	5%
Annual load factor	63.89	62.22	3%
Percent net winter dependable capacity by	by fuel source		
Fossil	53%	58%	(9%)
Nuclear	20%	13%	54%
Hydro	19%	20%	(5%)
Combustion turbine	8%	9%	(11%)



# CRAVEN CROWELL, Chairman

Crowell was appointed to the Board of Directors by President Bill Clinton and confirmed by the U.S. Senate in 1993. President Clinton named him as TVA's 11th Chairman. Crowell, who has 12 years of service at TVA, is a member of the Economic Club of New York, the board of the Electric Power Research Institute, and the board and Executive Committee of the Nuclear Energy Institute.

# JOHNNY H. HAYES, Director

Hayes was appointed to the Board of Directors in 1993 by President Bill Clinton. Before joining the TVA Board, he served two appointments in the cabinet of Tennessee Governor Ned McWherter including Commissioner of Economic and Community Development. Before entering public service, Hayes was president of Newman, Hayes & Dixon, an independent insurance agency he founded in 1964 in Hendersonville, Tennessee. He is co-chairperson of the Knoxville/TVA Community Relations Council.

#### WILLIAM H. KENNOY, Director

Kennoy was appointed to the Board of Directors in 1991 by President George Bush. A professional engineer, he was president of Kennoy Engineers, Inc., an environmental engineering firm in Lexington, Kentucky, from 1971-1991. He serves on the Intermodal Advisory Panel of the Kentucky Transportation Cabinet, Clean Coal Technology Tactic Team, and The Partnership for Kentucky School Reform.

# THE POWER TO LEAD



INDUSTRY IS NO LONGER AN ABSTRACT IDEA. IT'S HAPPENING RIGHT NOW. ANYONE WHO HAS WATCHED DEREGULATION RESHAPE THE AIRLINE AND TELEPHONE INDUSTRIES KNOWS THERE WILL BE WINNERS AND LOSERS. IN THE COMING YEARS, TVA WILL BE A WINNER IN THE ENERGY

business because we are taking the right steps today.

We have increased productivity, cut costs, and upgraded our generating capacity. At the same time, we have developed and are now implementing a long-term strategic plan to meet the challenges and take advantage of the opportunities that await us in a deregulated marketplace.

Today, TVA is the largest electric utility in the nation and one of the most efficient. No tax dollars support the TVA power system. Since 1959, the power system has paid its own way, with sales this year amounting to \$5.7 billion. TVA is also paying back the federal government for its initial investment in power plants built before 1959. And TVA makes tax-equivalent payments of 5 percent of our sales—or a little more than a quarter-billion dollars annually—to state and local governments in nine states.

During the past nine years, while the cost of living has risen more than 35 percent, the price of TVA power has remained stable. We accomplished this by cutting operating costs by nearly \$800 million, reducing our workforce from 34,000 to 16,000, and tripling employee productivity. On behalf of Directors Hayes and Kennoy, I would like to thank the men and women of TVA who have made these achievements possible. They have become more efficient, they are doing more with less,

and they are finding new and better ways to serve our customers during the coming era of deregulation.

According to *Electric Light & Power* magazine data, TVA is the second lowest-cost power producer among the nation's 50 largest electric utilities. The magazine also rated TVA's Bull Run plant the top steam plant in the nation, based on heat rate, while our John Sevier and Gallatin plants also placed among the Top 25.

During the past four years, we have increased capacity factors at our fossil plants nearly 20 percent. On December 24, 1995, all 59 TVA fossil units and four available nuclear units operated at the same time. On January 22, 1996, 112 of our 113 hydro generators were available for operation on the same day. And in June, all five of our nuclear units were at full power, setting a record for nuclear generation at TVA.

In a first for a utility in the United States, we brought two nuclear units online within three months of one another, thus ending our nuclear construction program and making it possible for us to cut capital expenses in half. As a result, for the first time in 35 years, TVA will not increase its debt in the coming year.

In our efforts to aggressively manage the debt, we have successfully broadened our investor base by selling bonds to global, regional, and retail investors; and we are preparing a five-year financial plan to help reduce our debt.

As part of our long-term strategic plan, we expanded our marketing and advertising efforts, and we created a new Customer Service & Marketing Group. This organization will usher in a new era of customer relations, economic development, technology advancements, and energy marketing. In the months ahead, we will seek new business opportunities, provide our customers with more flexible contracts, and offer more choices in energy services.

In anticipation of these new business initiatives, TVA was a catalyst in the formation of the Public Power Alliance (PPA). This business partnership will help members launch new businesses, provide new services, and hone their competitive edge. The PPA will also serve as an advocate for public power's longstanding mission of public service.

TVA is an enthusiastic supporter of our industry's move toward deregulation. At the same time, we remain solidly committed to power supply reliability, universal access, environmental responsibility, and economic development. This commitment to service has led us to call for a new regulatory system that promotes free-market competition while protecting the common good. The electric-utility industry is too vital to the nation to be regulation-free. And the reality is that re-regulation, not deregulation, will shape the new, competitive market.

We expect many changes in the coming years. One of them will be the increasing globalization of the utility industry. Looking toward international markets, TVA recently co-hosted a series of meetings in China between about 65 Tennessee Valley business leaders and the Chinese government. The goals of the meetings were to open doors for international trade, help China develop its electricity resources, and bring economic development to the Tennessee Valley.

These meetings were immensely successful, and we look forward to strengthening the business relationships that were established between China and the Tennessee Valley.

Innovation is the foundation of TVA's success and has made TVA a yardstick for the electric-utility industry. We stand on the threshold of a new century, ready to fulfill our vision of being recognized as the world leader in providing energy and related services, independently and in alliances with others, for society's global needs.

Ciaren Crowell

Chairman

TVA VISION

TO BE THE

RECOGNIZED WORLD

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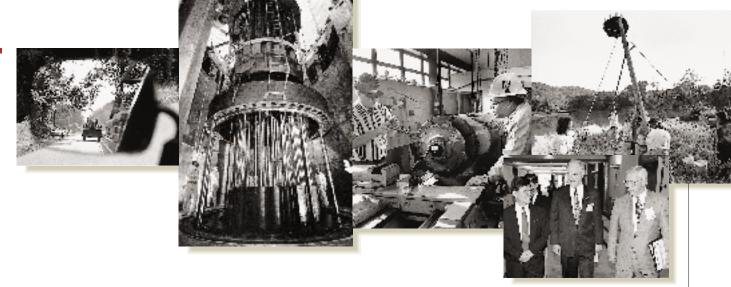
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The Tennessee Valley Authority is a federal corporation, the nation's largest electric-power producer, a regional economic development agency, and a national center for environmental research.

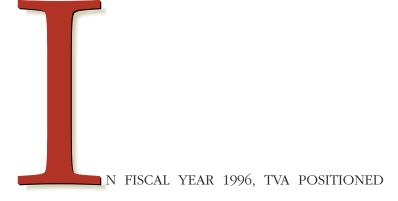
TVA's power-service area covers 80,000 square miles (200,000 square kilometers) in the southeastern United States, including most of Tennessee and parts of Mississippi, Kentucky, Alabama, Georgia, North Carolina, and Virginia. TVA also manages the Tennessee River, the nation's fifth-largest river system.

TVA operates 11 coal-fired plants, three nuclear plants, 29 hydroelectric dams, and a pumped storage plant. Together, they provide 28,123 megawatts of net winter dependable generating capacity. TVA provides power to 160 municipal and cooperative power distributors, and directly serves about 67 federal and industrial customers in the Valley through a network of 17,000 miles (27,000 kilometers) of transmission lines. TVA supplies the energy needs of nearly 8 million people.

As of September 30, 1996, TVA had 16,021 employees.



# THE YEAR IN BRIEF



ITSELF TO BE A LEADER IN THE DEREGULATED ELECTRIC-UTILITY MARKETPLACE. WE ARE KEEP-

ING FUEL COSTS LOW AND AVAILABILITY HIGH, LOWERING THE COST OF DOING BUSINESS,

AND HONING TVA'S CUSTOMER FOCUS. TVA HAS SEIZED CONTROL OF ITS FUTURE, CREATING

a strategic direction that emphasizes new marketing and business opportunities, vigilant debt management, and valuable partnerships and alliances.

# Here's how 1996 unfolded:

#### **Customer Focus**

# ■ TVA ANNOUNCES 10TH YEAR OF STABLE PRICES

Citing employees' cost-cutting efforts, increased productivity, and higher-than-projected power sales, TVA announced it will hold its prices stable in 1997 for the 10th consecutive year.

# ■ TVA Announces Creation of Customer Service & Marketing Group

By seeking new business opportunities, the Customer Service & Marketing Group will help TVA become a strong competitor in the deregulated energy marketplace.

• DISTRIBUTORS, TVA BRING LIGNITE PLANT TO MISSISSIPPI With the cooperation of Mississippi distributors of TVA power, TVA agreed to purchase power from a ligniteburning electric power plant in Choctaw County. The facility should generate 1,000 jobs and \$7 million in taxes.

#### **Operational Excellence**

■ Browns Ferry Nuclear Plant Loads Unit 3 Fuel

The unit came back online two weeks ahead of schedule.

■ WATTS BAR RECEIVES FULL-POWER OPERATING LICENSE

The unit added 1,138 megawatts to the system—enough electricity to supply about 250,000 homes.

■ DEPENDABLE CAPACITY INCREASED 9 PERCENT

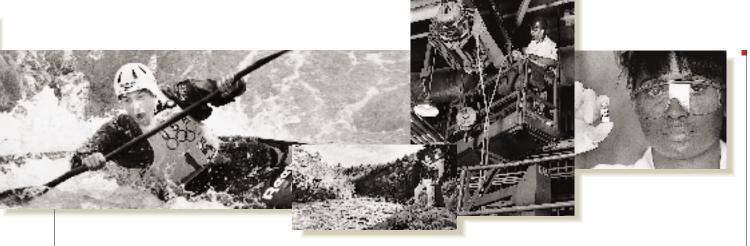
With the addition of the two nuclear generating units, TVA's net winter dependable capacity increased about 2,200 megawatts.

■ TVA MEETS PEAK

TVA met an all-time system peak demand of 25,995 megawatts on February 5, 1996.

• GENERATING UNITS: ALL TOGETHER, NOW

On December 24, all 59 fossil units and four available nuclear units were operating at the same time. On June 16, 1996, all five of TVA's nuclear generating units were



operating at 100-percent power.

#### • Nuclear Plant Refuels Faster

Employees at the Browns Ferry Nuclear Plant completed a refueling outage in a record-setting 31 days, 24 days fewer than the industry average.

# ■ SEQUOYAH 2 SETS RECORD

Sequoyah Nuclear Plant Unit 2 completed a maintenance and refueling outage in a site record of 50 days, 17 hours. During the outage, TVA replaced the condenser in 36 days, believed to be a new world record for nuclear plants.

• Substation Dedicated in Limestone County, Alabama
The \$37-million facility will ensure reliable power and promote economic growth in northern Alabama.

#### **Debt Management**

#### CHAIRMAN ANNOUNCES NO DEBT INCREASE IN 1997

"Capping our debt is an important step as we prepare for the opportunities and challenges of a deregulated utility industry," says TVA Chairman Craven Crowell.

#### ■ TVA Won't Borrow More for Capital Expenditures

Crowell also announced that the next year would be the first time in 35 years that TVA would not borrow additional money for capital expenditures.

#### ■ TVA BOND INTEREST RATE LOWER THAN U.S. TREASURY

The \$600-million issue had an interest rate of 5.98 percent—compared to the U.S. Treasury rate of 6.10 percent.

## • SECOND QIDS ISSUE SUCCEEDS

The second issue of TVA's retail offering—Quarterly Income Debt Securities—sold \$500 million to small investors, half of them new accounts.

# ■ TVA ISSUES DEUTSCHE MARK BOND

TVA launched a 1.5 billion Deutsche mark bond issue in Europe at the same time the European Investment Bank launched a 1 billion issue in U.S. dollars in the United States. Each corporation saved money by swapping proceeds with the other.

### Strategy for the Future

#### ■ ENERGY VISION 2020: FINAL PLAN UNVEILED

The TVA Board announced the final version of the

Integrated Resource Plan—Energy Vision 2020. The plan will guide TVA's energy strategies for the next 25 years.

#### ■ TVA SIGNS FIRST OPTION PURCHASE AGREEMENT

TVA, the first in the utility industry to request proposals for option purchase agreements (OPAs), signed an OPA to buy power from a proposed \$400-million gas-fired generating plant in Batesville, Mississippi. OPAs offer competitive prices, limited capital expenditures, and flexibility in power planning.

#### • CHIEF OFFICERS' ASSIGNMENT: PREPARE FOR COMPETITION

Based on recommendations of strategic planning teams, TVA's four Chief Officers developed plans—in Marketing & Development, Transmission, Nuclear, and Finance—to allow TVA's established businesses to compete and new businesses to grow.

#### ■ TVA, THREE OTHERS FORM PUBLIC POWER ALLIANCE

The alliance of TVA, Municipal Electric Authority of Georgia, Municipal Energy Agency of Mississippi, and Old Dominion Electric Cooperative will allow them to provide better, lower-cost services to their customers.

# ■ CHAIRMAN ENCOURAGES PUBLIC/PRIVATE ALLIANCES

In a speech to the Morgan Stanley Global Electricity Conference, Chairman Crowell called for more and better alliances between public and private businesses in the energy sector—in the U.S. and internationally.

#### ■ TVA AND TENNESSEE SIGN AGREEMENTS WITH CHINA

TVA reached agreements with China's Ministry of Water Resources, its Ministry of Electric Power, and Lishui Hydro & Power Corp. that could lead to helping China develop its Han and Li rivers and improve its coal-fired plants.

# ■ TVA CHAIRMAN SUPPORTS IDEA OF REGIONAL REGULATION

"Comprehensive federal regulation is needed," Crowell told the Transmission & Distribution World Deregulation Conference. "Perhaps it could take the form of six, independent regional bodies."

## ■ TVA TOPS IN PRODUCING ELECTRICITY

According to *Electric Light & Power* magazine, TVA is the largest producer of electricity, and the second lowest-cost power producer among the nation's 50 largest utilities. ■